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Senate Select Committee on Climate Policy
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Dear Senator

Thank you for the opportunity to make a submission.

In particular, WWF-Australia welcomes the comprehensive Terms of Reference which seek to identify the most effective and efficient ways to achieve substantial near-term and deep long term emissions reductions. This Submission will address each of the five key issues in the Terms of Reference.

Emissions trading as the central policy to reduce Australia's carbon pollution

Reducing emissions will require the transformation of the energy/electricity, industrial and agricultural sectors. The scale of this transformation is vast and so profound, albeit that it will be done over many years, that there really is no "central policy" to reduce Australia's carbon pollution.

A suite of policies and measures will be the effective and efficient way to reduce pollution comprised of research, development and deployment, of low pollution technologies, regulation to improve the efficiency of energy consuming devices, programs to support communities and workers and industries in the transition to a low carbon future all of which supported by a carbon price. Given the scale of the transformation and the variety of actions and activities required to effect that transformation, it is practically meaningless to suggest that the carbon price is the central policy. However a carbon price is an essential component of the overall suite and WWF submits that an emissions trading scheme is clearly to be preferred over a carbon tax.

An emissions trading scheme is more effective at reducing pollution because it caps the amount of permissible pollution through a specific reduction target by a certain date. This feature also avoids one of the key problems associated with a tax (in circumstances where the cost of pollution reduction is uncertain) namely the need to regularly adjust the amount of the tax. Another key advantage of an emissions trading scheme is that it is comparatively easy to integrate with overseas pollution reduction schemes, one of the key reasons it was supported



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by the Australian State/Territory National Emissions Trading Scheme Taskforce, Prime Minister Howard's Emissions Trading Task Group, the Garnaut Climate Change Review and the Stern Review in the United Kingdom.

However the most compelling reason for introducing an Australian emissions trading scheme is time. Action to reduce national emissions is required today if a smooth transition to a low carbon economy is to be made; the existing Carbon Pollution Reduction Scheme is generally sound (but note the comments below); and it would take many years to develop and implement a carbon tax in circumstances. Accordingly, WWF supports the introduction of an Australian emissions trading scheme by 2010.

The role of complementary measures

An emissions trading scheme will not drive the technological revolution necessary to reduce emissions at the scale required (at least 50% worldwide by 2050; about 80%-90% in developed countries) in the time available, or reduce emissions by improving efficiency; improvements in efficiency are known to be resistant to a price signal (partly because energy is a low component of most household and business expenditure and partly – particularly in the case of the building sector – incentives do not align).

Fostering Renewable Energy Industries

Reductions of 60%-90% simply cannot be made without the very large-scale deployment of low or zero emission energy generation. This in turn cannot occur without large-scale supporting industries which require large-scale human, material and engineering resources.

Australia has ample – indeed unlimited – renewable energy resources to provide all the energy required by the country in 2050 and reduce emissions by 80%-90%. However achieving reductions of that scale – or even achieving reductions of 60% in a manageable fashion, requires the fostering of low and zero emission energy industries today – long before a carbon price alone will suffice – because these industries need to be able to develop and grow at a sustainable speed.

Contrary to widespread belief, the rates at which industries can grow are well known and quite inflexible. Growth rates of 20% per year, year on year are very uncommon and extremely to achieve over a period of more than a few years. Growth rates of 30%, which are the sort of growth rates required to achieve emission reductions of 80%-90% are very rare and to this point in time largely limited to small, fast moving consumer goods like mobile phones, rather than the large-scale industrial enterprises required to transform the energy/electricity and industrial sectors.

The Government's 20% Renewable Energy Target Scheme by 2020 would be sufficient to foster the low and zero industries necessary to support the transformation of the energy/electricity sector provided the Scheme is restructured to foster the near-term



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deployment of geothermal energy, ocean energy, solar thermal power stations and other energy resources which will achieve large-scale cuts in Australia's greenhouse gas emissions.

At present the Renewable Energy Target Scheme will favour the near-term deployment of wind and biomass at the expense of "base-load"-type generation such as geothermal energy, ocean energy and solar thermal power stations and will create a renewable industry "boom" followed by a "bust" instead of a sustainable Australian industry. These issues can be comparatively easily addressed by:

- "Banding" the Scheme to foster "baseload"-type technologies. The Scheme already proposes this approach for domestic solar photovoltaic units and it would be comparatively simple to extend the proposal to geothermal, ocean and solar thermal as a starting point. This is the approach that the United Kingdom Government proposes to adopt (see Appendix A).
- Maintaining the Scheme until technologies exploiting geothermal, ocean and solar thermal and other baseload-type technologies are commercially viable under the CPRS (this will depend on the price under the Scheme but is likely to be at least 2030). The Renewable Energy Scheme Regulator should be empowered to terminate assistance once technologies are viable under the CPRS (and re-direct assistance to new resources or technologies).
- Providing all eligible projects with the ability to create Renewable Energy Certificates for 15 years regardless of the date they entered the Scheme. This would prevent money being spent on older projects, provide support to projects established later in the life of the Scheme and mitigate the boom-bust cycle.

The above approach is technology-neutral, but energy resource (eg. solar, ocean) specific thereby encouraging the rapid development of the most advanced and commercially attractive technologies to exploit particular resources.

If the Renewable Energy Target Scheme is not banded, another form of financial assistance – provided in a manner that provides reasonable investment certainty to businesses which are investing in high-cost, long-term assets, is required. The assistance needs to be provided until the supported technologies/industries are commercially viable. Ad hoc grants should be avoided as they are costly for the Government to administer and do not provide the requisite long-term investment certainty to foster low emissions technology development.

Carbon capture and storage (CCS)

In the period to 2050 carbon capture and storage should be able to reduce carbon pollution from coal and gas fired power stations (and industrial processes like cement and iron and steel). However no integrated carbon capture and storage coal power stations are operating anywhere in the world. For this technology to play a significant role in the mitigation effort it



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must be trialled at scale as soon as possible. While the Australian Government's Global CCS Initiative is welcome, a national carbon capture and storage strategy is required which:

- Constructs or leads to the construction of two or three demonstration CCS projects by 2013/2015;
- A target of at least 1,000 megawatts of coal-fired CCS by 2020 supported by a market based CCS target scheme or feed-in-tariff;
- An infrastructure and investment strategy (in particular a pipeline strategy);
- Environmentally sound nationally consistent legislation for the storage and monitoring of geologically sequestered carbon dioxide; and
- A ban on the construction or substantial refurbishment of any new coal fired power stations unless they capture and store carbon on the date they are commissioned.

Consideration should also be given to a levy or charge on fossil fuel producers and exporters with the whole of the levy being applied to CCS demonstration and commercialisation.

Although both this approach and the Renewable Energy Target Scheme involves “picking winners,” each major step change in technological development – railways, electricity generation, aircraft, satellites and computers – has involved very large-scale Government financial or other preferential support simply because the transition from research and development to initial deployment to commercialisation is rarely profitable.

Energy Efficiency

The true scale of the carbon pollution reduction opportunity provided by energy efficiency is difficult to measure, largely because most energy efficiency programs have not gathered outcome-focused data. However the data that has been gathered, the opinion of most energy efficiency experts and studies that compare Australian energy efficiency with other countries, suggest that the opportunity to reduce emissions (for a time) provided by energy efficiency is large, and that it will foster a more efficient Australian economy while assisting low income households to make the transition to a lower emission economy.

Direct regulation is required to address energy efficiency as the barriers to implementing energy efficiency measures (even cost effective measures), are known to be resistant to price. Targeted energy efficiency regulatory measures provide ample opportunity to stabilise emissions and contribute substantially to achieving Australia's 2020 emission reduction target. This includes improving appliance, plant and equipment energy efficiency, improving building energy efficiency, and large scale energy efficiency retrofit programs to improve the efficiency of existing building stock.



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Amongst other things, the *Energy Efficiency Opportunities Act 2006* should be reviewed to ensure that all emissions-intensive trade-exposed entities under the CPRS are liable under the *Energy Efficiency Opportunities Act 2006*.

Comprehensive action on energy efficiency has three important ancillary benefits:

- It provides near-term, low-cost reductions in emissions. If Australia is to foster a breakthrough international climate agreement, significant reductions in national emissions will be needed by 2020;
- It helps postpone the need for new electricity generation. This in turn provides time for the demonstration and deployment of low emission technologies and avoids the “lock-in” of new polluting plant;
- It provides immediate employment opportunities in the building and ancillary trades. This is particularly true if programs to deploy energy efficiency devices at a mass-scale are adopted (such as door-to-door deployment of insulation, water saving devices, rainwater tanks, etc).

The environmental effectiveness of the Carbon Pollution Reduction Scheme

The environmental effectiveness of the CPRS is limited by an inadequate 2020 emission reduction target range. The Intergovernmental Panel on Climate Change has indicated that developed nations will need as a group to reduce their emissions by 25-40% by 2020 in order to stabilise emissions at 450 parts per million. In such circumstances the current 5%-15% is manifestly inadequate. The target should be revised to provide a reduction of at least 25% by 2020 (see further following section). However, given the urgency for commencing Australia's emission reductions, a review of the target is not a reason to delay commencement of the Scheme in 2010.

A fair, equitable and realistic contribution to global emission reduction efforts

The primary objective of Australian greenhouse gas policy must be to secure an effective international agreement to slow, stop and then reverse global greenhouse gas emissions with a view to avoiding a warming of more than 2 degrees Celsius.

WWF believes that the goal should be for greenhouse gas levels to be stabilised at as close as possible to 400 parts per million as possible. Achieving this goal would require emissions to peak at about 475 parts per million and then fall as they are absorbed by the ocean and biosphere. This goal would be consistent with having a reasonable chance of avoiding the worst impacts of climate change.

For this, an effective international agreement needs to be secured in the current round of negotiations concluding in Copenhagen in December 2009.



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In such circumstances WWF believes that Australia should make a conditional offer to cut emissions 25% below 1990 levels provided other developed countries make comparable cuts and major developing countries significantly slow their emission growth. This might encourage similar offers from other countries. If an agreement for even deeper cuts emerges, Australia should be willing and able to support it.

Whether the design of the proposed Carbon Pollution Reduction Scheme will send appropriate investment signals

The Carbon Pollution Reduction Scheme is expected to raise about \$11.5 billion in its first year. It is also expected anticipated that a minimum of 25% of permits will be allocated to emissions-intensive trade-exposed industries, rising to a minimum of 45% of permits by 2020. The current allocation of free permits and revenue from auctioning does not assist the transition to a low carbon economy because it fails to provide sufficient revenue for the deployment of low emission technologies particularly in the non-energy industrial sector, agriculture sector and urban areas and locks-in an increasing percentage of compensation to big polluters. There is also excessive support for middle-income households.

WWF submits that a policy decision should be adopted to provide 50% of auction revenue to households and communities for the first few years of the Scheme only, 20% to foster the low emission industries of the future and 20% to provide assistance (with the objective of avoiding carbon leakage) to emissions-intensive trade-exposed industries; with an additional 10% available for this purpose upon the inclusion of agriculture in the Scheme.

WWF submits that transitional assistance of \$3.9 billion over five years should not be provided to coal-fired power generators under the Electricity Sector Adjustment Scheme. As generators have the ability to pass through costs, the Sector compensation is economically inefficient, socially inequitable, and violates “polluters pay” principles. On the other hand, providing financial and other assistance to low emission technologies will foster clean and sustainable new industries, new jobs in industries that necessarily must operate in Australia and an opportunity to provide environmentally and socially responsible assistance to communities and workers affected (in the short-term) in the transition to a low carbon economy.

If you have any queries or require further information, please do not hesitate to contact me on 0410 086 986 or ptoni@wwf.org.au, or Nicole Ikenberg, Policy Manager Climate Change, on 0400 324 107 or nikenberg@wwf.org.au.

Yours faithfully

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